

2010 Cohort

Story Problems (K to 7) – based on page 24 FSiM Operations Resource book

Early Primary

Change: Join

Tom had 5 frogs and then his sister gave him 4. How many frogs does he now have?
(result unknown)

Tom had 6 frogs but he would like to have 9. How many more does he need to get? (change unknown)

Tom had some frogs and then his sister gave him 2. Now he has 9. How many did he have to start with? (start unknown)

Change: Separate

Tom had 9 frogs and then he gave his sister 3? How many does he now have? (result unknown)

Tom had 9 frogs and then he gave his sister some. He now has 5. How many did he give his sister? (change unknown)

Tom had some frogs and gave his sister 2 of them. Now he has 7 left. How many did he have to start with? (start unknown)

Combine

Tom has 5 big frogs and 4 small frogs. How many does he have in all? (whole unknown)

Tom has 9 frogs. 6 are big and the rest are small. How many are small? (one part unknown)

Equalize or Compare

Tom has 8 big frogs and 6 small frogs. If all the big frogs have a small frog as a buddy, how many big frogs won't have a small buddy?

Tom has 7 big frogs and some small frogs. All the big frogs have a small frog as a buddy but there were 3 small frogs without a buddy. How many small frogs does he have?

Tom has 9 big frogs and some small frogs. All the big frogs tried to find a buddy but there were 3 small frogs too few. How many small frogs does Tom have?

Tom has 9 big frogs and 7 small frogs. How many more big frogs does Tom have?

Tom has 6 big frogs and some small frogs. He has 2 more small frogs than big frogs. How many small frogs does he have?

Tom has 8 big frogs and some small frogs. He has 3 fewer small frogs. How many small frogs does Tom have?

Another set of Early Primary

The King of Hearts had 4 tarts and the Queen gave him 2. How many does he have now?

The King of Hearts has 6 tarts and he would like to have 9, how many more does he need to get?

The King of Hearts had some tarts and the Queen gave him 4. Now he has 10. How many did he start with?

The King of Hearts had 9 tarts and he ate 2. How many does he have now?

The King of Hearts had 8 tarts and he gave the prince some. The King has 5 left. How many did he give to the prince?

The King of Hearts had some tarts and he gave the princess 5 of them. Now he has 2 left. How many did he have to start with?

The King of Hearts has 3 cherry tarts and 5 lemon tarts. How many tarts does he have in all?

The King of Hearts has 10 tarts. 3 are cherry and the rest are lemon. How many tarts are lemon?

The King of Hearts has 9 cherry tarts and 7 lemon tarts. If he puts two tarts on each plate, one of each flavour, how many cherry tarts will be left over?

The King of Hearts has 6 cherry tarts and some lemon tarts. All the cherry tarts were paired with a lemon tart and there were 4 lemon tarts left over. How many lemon tarts does the king have?

The King of Hearts has 8 cherry tarts and some lemon tarts. All the cherry tarts tried to have a lemon tart partner but there were 3 lemon tarts too few. How many lemon tarts does the king have?

The King of Hearts has 9 cherry tarts and 8 lemon tarts. How many more cherry tarts does the king have?

The King of hearts has 6 cherry tarts and some lemon tarts. He has 5 more cherry tarts than lemon tarts. How many lemon tarts does he have?

The King of Hearts has 10 cherry tarts and some lemon tarts. He has 6 fewer lemon tarts. How many lemon tarts does the king have?

More Early Primary

Taylor went to the Pumpkin Patch with her class and picked out 3 pumpkins for carving. Her friend Sydney picked out 5. All together how many pumpkins did Taylor & Sydney take back to their class for carving? (Result unknown)

Taylor's class went to the pumpkin patch to get pumpkins for their class. Her teacher told her she needs to choose 8 pumpkins to bring back to school. She chose 3 big pumpkins and put them in the bus. How many more pumpkins does Taylor need to choose? (change unknown)

Taylor & Sydney's class went to the pumpkin patch. Taylor chose some pumpkins and put them on the bus. We saw Sydney choose 5 pumpkins and put them on the bus. If there were 8 pumpkins on the bus, how many did Taylor choose? (start unknown)

Late Primary

CHANGE:

Join:

Joe had 6 crayons and then his sister gave him 6. How many does he now have?

Justin had 3 crayons, but would like to have 10. How many more does he need?

Jillian had some crayons and then Joe gave her 2. Now she has 8. How many did she have to start with?

Separate:

Sarah had 10 candies and then gave her friend 2. How many does she now have?

Sally had 14 candies and then she gave Sarah some. She now has 7. How many did Sally give Sarah?

Samuel had some candies and gave his sister 6 of them. Now he has 9 left. How many did he have to start with?

COMBINE:

Karen has 3 red t-shirts and 2 blue t-shirts in her closet. How many does she have in all?

Kristie has 20 shoes. 8 are black and the rest are white. How many are white?

EQUALIZE or COMPARE:

Melissa had 3 black cats and 4 multi-coloured cats. If all of the black cats take a multi-coloured cat as a partner, how many multi-coloured cat won't have a partner?

Larry has 5 green dinosaurs and some brown dinosaurs. All of the green dinosaurs took a partner, and there were 2 brown dinosaurs left without a partner. How many brown dinosaurs does he have?

Greg has 6 green dinosaurs and some brown dinosaurs. All of the green dinosaurs tried to take a partner but there were 2 dinosaurs too few. How many brown dinosaurs does Greg have?

Larry has 13 green dinosaurs and 6 brown dinosaurs. How many more green dinosaurs does he have?

Larry has 9 green dinosaurs and some brown. He has 4 more green dinosaurs than brown dinosaurs. How many brown dinosaurs does he have?

Larry has 11 green dinosaurs and some brown dinosaurs. He has 7 fewer brown dinosaurs. How many brown dinosaurs does he have?

Late Primary/Early Intermediate

Join Problems

Result Unknown

Sarah has 15 hair elastics. Emily gives her 12 more hair elastics. How many hair elastics does Sarah have altogether?

Change Unknown

Emily had 12 barrettes. How many more barrettes does she need to have 28 barrettes altogether?

Start Unknown

Tyler has a group of gummy worms. Paul gave him 12 gummy worms and now he has 42 gummy worms. How many gummy worms did Tyler have to start with?

Separate Problems

Result Unknown

Sandy had 25 candies. She gave 14 to Aidan. How many candies does Sandy have left?

Change Unknown

Jason has 75 miniatures. He gave some to Brian. Now he has 42 left. How many miniatures did Jason give to Brian.

Start Unknown

Chloe had some Little Pet Shop animals. She gave 12 to Acacia. Now she has 23. How many Little Pet Shop animals did Chloe start with?

Combine Problems

Whole Unknown

Liam has 8 orange balloons and 6 yellow balloons. How many balloons does she have in all?

Part Unknown

Marie has 16 Smarties. 5 are red and the rest are purple. How many purple Smarties does Marie have?

Equalize Problems

Jane has 21 yellow flowers and 15 pink flowers. If all the yellow flowers took a pink flower as a partner how many pink flowers would not have a partner?

Sally has 25 blue ribbons and some orange ribbons. All the blue ribbons took an orange ribbon as a partner and there were 7 orange ribbons without a partner. How many orange ribbons does Sally have?

Dick had 14 green toy trucks and some red toy trucks. All the green toy trucks wanted to partner with the red toy trucks but there were 6 too few red toy trucks. How many red toy trucks did Dick have?

Compare Problems

Richard has 23 red sailed boats and 15 yellow sailed boats. How many more red sailed boats does he have?

Sophie has 13 yellow cups and some green cups. She has 8 more green cups than yellow cups. How many green cups does she have?

Jenny has 15 white pom poms and some blue pom poms. She has 6 fewer blue pom poms. How many blue pom poms does she have?

Another Late Primary/Early Intermediate

Change - Join result unknown

Tom the goalie saved 26 pucks in practice. During the game he saved 37. How many pucks did he save?

Join change unknown

The Canucks scored 18 points but wanted to score 23. How many more goals did they need?

Join Start unknown

The coach had some bottles of Gatorade and the assistant coach gave him 27. Now he has 35. How many does he have now?

Separate Result unknown

The hockey player had 36 pucks in his hockey bag. He gave his team mate 19. How many does he have now?

Separate change unknown

The baseball players had 45 baseballs. They threw some into the crowd. They now have 29. How many did they throw into the crowd?

Separate start unknown

The baseball players threw 64 baseballs into the crowd. At the start of the game they had 37 baseballs. How many did they start with?

Combine - Whole unknown

In the first game, John saved 138 pucks. In the second game he saved 53. How many shots did he save?

One part unknown

The goalie had 117 pucks. 66 pucks were in the net and the rest were in a bucket on the ice. How many were out of the net?

Equalize

There were 32 blue and 17 white hockey players. If all the white players checked a blue player, how many hockey players wouldn't get a check?

There were 29 blue hockey players and some white hockey players. All the blue hockey players checked a white hockey player and there were 5 white hockey players left. How many white hockey players are there?

There were 41 blue hockey players and some white hockey players. All the blue hockey players tried to find a white hockey player for a partner drill but they were short 16 white hockey players. How many white hockey players are there?

Compare

Tom has 213 blue ball caps and 162 red caps. How many more blue ball caps does he have?

Tom has 215 blue ball caps and some green ball caps. He has 62 more green caps than blue caps. How many green ball caps does Tom have?

Tom has 313 green ball caps and some white caps. He has 919 fewer white ball caps. How many white ball caps does Tom have?

Another set of Late Primary/Early Intermediate

Change

Dan had 298 jellybeans in a jar. Doug had a big jar of jellybeans too. Together they had 574 jellybeans. How many jellybeans did they have? (change unknown)

Doug had a jar of 276 jellybeans. Dan gave Doug 298 jellybeans. How many jellybeans does Doug now have? (result unknown)

Doug had some jellybeans and Dan gave him 298. Now Doug has 574. How many jellybeans did Doug start with? (start unknown)

Combine

Doug had 574 jellybeans. 276 are orange and the rest are black. How many of the jellybeans are black?

Equalize

Doug had 276 orange jellybeans and 298 black jellybeans. If all the orange jellybeans were partnered with black jellybeans, how many black jelly beans wouldn't have a partner?

Another set of Late Primary/Early Intermediate

Change - Join

Becky collected 38 pine cones and then Devon gave him 13. How many does Becky have now?

Becky had 8 pine cones but wants 12 to make a wreath. How many more does she need to pick?

Becky had some pine cones and then Devon gave her 7. Now she has 24. How many did she have to start with?

Change - Separate

Becky collected 38 pine cones and then gave Devon 13. How many does Becky have now?

Becky had 12 pine cones and she gave Devon some. She now has 5. How many did she give Devon?

Devon had some pine cones and gave Becky 7. Now she has 17. How many did she have to start with?

Combine

Becky has 11 pine cones and 17 cedar cones. How many cones does she have in all?

Devon has 43 cones. 26 cones are pine cones and the rest are cedar cones. How many are cedar cones?

Equalize or compare

Becky has 37 pine cones and 13 cedar cones. If she matches one pine cone with one cedar cone, how many pine cones will be left?

Becky has 49 pine cones and some cedar cones. All the cedar cones were matched with a pine cone and there were 11 cedar cones left. How many cedar cones did she have?

Becky has some pine cones and 28 cedar cones. All the cedar cones were matched with a pine cone but there were 9 pine cones too few. How many pine cones does she have?

Devon has 37 pine cones and 13 cedar cones. How many more pine cones does she have?

Becky has 14 cedar cones and some pine cones. She has 5 more pine cones than cedar cones. How many pine cones does she have?

Devon has 51 pine cones and some cedar cones. She has 5 fewer pine cones than cedar cones. How many cedar cones does she have?

Another set of Late Primary/Early Intermediate Upper Intermediate

Donna and Karen each had 36 tickets to sell for the school dance. How many tickets did they have all together?

Karen started out with 28 tickets to sell. Her friend Carmen gave her a few more tickets to sell. Karen now has 36 tickets to sell, how many did Carmen give her?

Donna has 36 tickets after her friend Barb gave her 15 tickets. How many tickets did Donna have to start with?

Levi had 50 Star Wars figures. He gave 26 of these figures away. How many figures does he have left?

Stuart had 342 Star Wars figures but when they were moved some of figures got broken. Stuart now has 298 figures that are in perfect condition, how many figures were broken?

Marco has many Star Wars figures even after he sold 42 of them. Marco now has 175 Star Wars figures, how many figures did Marco have before he sold some?

Darlene had 133 red baskets and 269 yellow baskets. How many baskets in all did Darlene have?

Danielle has 259 red and white baskets. Danielle has 134 red baskets. How many of the baskets are white?

There were 128 boys and 132 girls at the school dance. If everyone paired up in a boy girl couple how many couples would there be? How many kids would be without a partner? Are they girls or boys?

Tanya has 46 bottles of nail polish. Half as many of the bottles of polish have sparkles. How many bottles don't have sparkles?

Change - Separate

Luc had \$550 000. He spent \$280 000 on a house. How much money does he have left?

Blayne had \$385 000. He worked for 2 years on the oil rigs in Alberta and saved money. Now he has \$474 000. How much money did he save in the 2 years?

Alex had some money and then she bought a house. The house cost \$345 000. She has \$264 000 left after buying the house. How much money did she have to start with?

Join

Jenna had \$33 450. She worked for a year and saved \$7 820. How much money does she have in total?

Sasha had \$25 645. She worked on a cruise ship for 3 years and now she has \$49 270. How much did she save in the 3 years she worked?

Kyle collects coins. His Uncle gave him 1248 coins and now he has 2780 coins. How many coins did he have to start with?

Combine

Ben spends 485 000 seconds per year on the computer playing games and Brandon spends 326 000 seconds per year on a Gameboy playing games. How many seconds per year do the 2 boys spend playing these electronic games?

Thomas spends 2821 minutes a year on the computer. He spends 1245 minutes per year playing computer games. How much time does he spend on the computer not playing games?

Equalize or Compare

A toy factory has 128 200 packages of playdough and 178 000 boxes of crayons. How many more boxes of crayons do they have?

A toy factory has 254 000 packages of crayons and some packages of playdough. They have 18 000 more packages of playdough than packages of crayons. How many packages of playdough does the factory have?

A toy factory has 148 000 packages of playdough and some packages of crayons. There are 69 000 fewer packages of crayons. How many packages of crayons are there?

The company Future Shop sells cell phones. In stock they have 38 500 Kodo cell phones and 27 600 Telus cell phones. If they shipped an equal number of each type of phone to BC stores, how many Kodo cell phones would be left?

Future shop has 9280 Telus cell phones in stock and some Kodo cell phones in stock. They shipped an equal number of Kodo and Telus cell phones to Ontario stores. There were 626 Kodo phones left in stock. How many Kodo phones did they have to start with?

Future shop has 350 800 Kodo cell phones in stock and some Telus cell phones in stock. When the Kodo cell phones are matched with Telus cell phones there are 6250 fewer Telus cell phones. How many Telus cell phones are in stock?

Upper Intermediate – French

5e année - l'addition et la soustraction

Le résultat inconnu (Result unknown)

Jacques a 136 bonbons. Sa mère lui donne 98 autres bonbons. Combien de bonbons a-t-il en tout ?

Le changement inconnu (Change unknown)

Marie possède 52 crayons de cire mais elle a besoin de 356 couleurs différents pour sa classe d'art. Combien de crayons de cire de plus doit-elle acheter ?

Le début inconnu (Start unknown)

Martin avait des livres sortis de la bibliothèque et il achète 196 autres livres du magasin. S'il a 322 livres en total, combien a-t-il emprunté de la bibliothèque ?

More Upper Intermediate

These ones were written for French Immersion students so the amounts are written using a comma for the decimal in money and the \$ at the end of the amount.

Change

Tim purchased a luxurious 4 wheel drive truck whereas Don purchased a simple 2 wheel drive truck. Tim paid 57 058,14\$ whereas Don paid 24 763,46\$. How much less expensive was Don's truck?

Combine

Tim and Don paid 81 821,60\$ altogether for their trucks. Tim paid 57 058,14\$. How much did Don's truck cost him?

Compare

Two men bought trucks for a total of 81 821,60\$. If Tim paid 32 294,68\$ more than Don, how much was Don's truck?

Equalize

Two men lived on a commune so they decided to combine their money in order to purchase one very capable truck and one very basic truck. The cost of the two trucks was 81 821,60\$. Don only has 24 763,46\$, so how much of Don's share will Tim have to pay in addition to his own share?

Two classes of students want to buy a present for their principal for a total cost of \$765.42. Class A only has \$320.21, so how much of Class A's share will Class B have to pay in addition to their own share?

Upper Intermediate – Algebraic thinking

Change - Join

Janet and Eric were playing checkers. Janet had 5 of Eric's black checkers and then she won 4 more. How many checkers did Janet have in total?

Peter has $4y$ skateboard stickers, and he would like to have $7y$. How many more stickers does he need?

Mary has $3x$ pairs of earrings, and her friend gave her 5 more pairs. Now Mary has 20 pairs of earrings. How many did she have to begin with?

Change - Separate

Eric had 10 checkers, but lost 6 of them to Janet. How many does Eric have left?

Peter has $7y$ stickers, but he gave some to his friend. How many does he have left?

Mary has some pairs of earrings, and she gave her friend x pairs. Now she has $3x$ pairs. How many did she have to start with?

If $x = 5$, how many pairs of earrings did Mary have to start with?

Combine - Join

Kyle has $2x$ orange jujubes, $3x$ grape jujubes, and x black jujubes. How many jujubes does he have in total?

Combine - Separate

Melissa has 12 red socks. 7 pairs are plain, and the rest have patterns. How many pairs have patterns?

Write an equation to express this relation, Then solve it, demonstrating your understanding of the preservation of equality.

Equalize or Compare - Join

Jenna has 8 positive integer tiles and 12 negative integer tiles. How many zero-pairs can she make? What will she have left? Express this as an integer.

Colin has 9 positive integer tiles and some negative integer tiles. If he has six zero pairs and he was left with -3 , how many negative tiles did he start with?

Randy has 8 positive integer tiles and some negative tiles. He was only able to make 5 zero pairs. How many more + tiles did he need to make 0?

Equalize or Compare - Separate

Graeme has $2x + 3$ apps for his iPad. Jon has $4x - 2$ apps for his. If they have 25 apps between them, how many more apps does Jon have?

Jane has x white beads and $x + 6$ black beads. If she has 20 beads in total, how many of each colour does she have?

Emily has $3x$ short skirts and three fewer long skirts. If she has 9 skirts, how many of each length does she have?